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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/567,599	02/09/2007	Yasuhiro Fujita	AOI-P41	8619
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LEIGHTON K. CHONG			EXAMINER	
PATENT ATTORNEY			ANDRISH, SEAN D	
133 KAAI STREET				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/567,599	<b>Applicant(s)</b> FUJITA, YASUHIRO
	<b>Examiner</b> SEAN D. ANDRISH	<b>Art Unit</b> 3672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on \_\_\_\_\_.  
 2a) This action is FINAL.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1 - 19 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) 13 - 15 is/are allowed.  
 6) Claim(s) 1 - 11 and 16 is/are rejected.  
 7) Claim(s) 12 and 17 - 19 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/0256/06)  
 Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_  
 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

**DETAILED ACTION**

***Drawings***

11. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "guide rails are provided so as to extend across said divided pile body portions" as recited in claim 3 and the "plurality of said guide rails are provided in said divided pile body portions" as recited in claim 4 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 3, 4, 11 - 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 3, the phrase "extend across" is indefinite because it is unclear whether each pile portion includes its own set of guide rails or if there is only set of guide rails that extends along the entire length of the pile assembly. Examiner interprets the limitation(s) of claim 3 to require that each divided pile body portion has its own plurality of guide rails. The guide rails of each divided pile body portion are aligned with the plurality of guide rails on adjacent pile body portions to create a plurality of guide rails that extend across said divided pile body portions.

Regarding claim 4, examiner interprets the claim limitation(s) to mean that each divided pile body portion has its own plurality of guide rails. If so, examiner suggests changing "provided in said divided pile body portions respectively" to --provided in each of said divided pile body portions respectively-- or something similar.

Regarding claims 11 and 13, applicant should amend the claim limitation "wherein is further capable" to specify what particular element of the claimed invention is further capable of performing the specified function.

Regarding claim 12, examiner interprets the phrase "on one side thereof" as on one side of the first magnetic cross gauge, but applicant should amend the claim language to clarify the object to which the above limitation refers.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 - 5, 8, 9, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita (5,975,808) in view of Gatien (3,487,646).

Regarding claims 1 - 5 and 16, Fujita discloses a pile assembly comprising: a core assembly (20); wedges (44); openings (14), the openings are formed as incised apertures; and a pointed leading member (12a) (Figs. 1 - 5 and 7; column 3, line 21 - column 4, line 3). Fujita fails to disclose guide rails. Gatien teaches an inner pipe (10) having lands (20) and an outer pipe (22) having valleys (24) (Fig. 3; column 1, line 55 - column 2, line 2), the lands and valleys of the inner and outer pipes, respectively, permit the inner pipe to move in an axial direction relative to the outer pipe. Examiner interprets element 24 of Gatien as two guide rails separated by a depression, the guide rails maintaining land (20) in a predetermined orientation within the pile structure. It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the structure as disclosed by Fujita with the lands and valleys as taught by Gatien to permit the inner pipe to move in an axial direction relative to the outer pipe. Examiner interprets the limitation(s) of claim 3 to require that each divided pile body portion has its own plurality of guide rails. The guide rails of each divided pile body portion are aligned with the plurality of guide rails on adjacent pile body portions to create a plurality of guide rails that extend across said divided pile body portions.

Regarding claim 8, Fujita further discloses wedge members (24) having different lengths (Fig. 3).

Regarding claim 9, Fujita further discloses the cross-sectional shape of the pile body is circular (Fig. 1).

6. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita in view of Gatien as applied to claim 1 above, and further in view of Nagashima (4,405,262).

Fujita in view of Gatien discloses all of the limitations of the above claim(s) except for spiral blades. Nagashima teaches a pile assembly including spiral blades (7) and a pointed leading member (6) with excavating components (5) (Fig. 1) to propel the pile into the ground. It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the structure as disclosed by Fujita in view of Gatien with the spiral blades as taught by Nagashima to propel the pile into the ground.

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita in view of Gatien as applied to claim 1 above, and further in view of O'Brien (1,982,687). Fujita in view of Gatien discloses all of the limitations of the above claim(s) except for hinges. O'Brien teaches wedge members (3) mounted on hinges (11, 12) (Figs. 1 and 4; page 1, lines 80 - 96) to affect a lateral or radial penetration into the surrounding soil which increases the bearing strength and frictional resistive strength of the pile structure. It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the structure as disclosed by Fujita in view of Gatien with the hinges as taught by O'Brien to affect a lateral or radial penetration into the surrounding soil which increases the bearing strength and frictional resistive strength of the pile structure.

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita in view of Gatien and Shiraishi (5,746,638). Fujita in view of Gatien discloses all of the limitations of the above claim(s) except for a magnetic cross gauge. Shiraishi teaches a magnetic cross gauge (block body 11) including a plurality of magnet holding portions (13) into which magnets are inserted (Fig. 3; column 4, lines 50 - 60) to connect multiple elements (blocks) together in a desired direction to create a variety of structures. The magnetic connection allows the magnetic cross gauge to be removed. It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the structure as disclosed by Fujita in view of Gatien with the magnetic cross gauge as taught by Shiraishi to connect multiple elements (blocks) together in a desired direction to create a variety of structures. The magnetic connection allows the magnetic cross gauge to be removed.

*Allowable Subject Matter*

9. Claims 13 - 15 are allowed.

10. Claims 12 and 17 - 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The closest prior art fails to teach or suggest:

- a. first and second cross gauge members provided with a plurality of recesses on the periphery thereof as required by claim 12
- b. the chronological order of the method steps of the manufacturing process as required by claims 17 - 19

***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Schmidt (3,033,144) teaches a magnetic cross gauge (welding apparatus 10; magnet 14) to draw two bodies such as tubes into welding position and maintain the bodies in the desired position.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SEAN D. ANDRISH whose telephone number is (571)270-3098. The examiner can normally be reached on Mon - Fri, 7:30am - 5:00pm, Alternate Fri off, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John Kreck/  
Primary Examiner, Art Unit 3672

SDA  
5/8/2009